



24th Congress of Chemists and Technologists of Macedonia

with international participation

Program

**XXIV Конгрес на
сојузот на хемичарите
и технолозите
на Македонија**
со меѓународно учество



11-14 September 2016
Ohrid, Republic of Macedonia

P R O G R A M

Sunday, September 11th 2016

17:00 **Registration**

19:30 **WELCOME PARTY**

Monday, September 12th 2016

9:00 **Registration**

10:00 **OPENING CEREMONY** Hall BILJANA, Hotel METROPOL

Hall BILJANA

PLENARY LECTURES

Chairpersons: Svetomir Hadzi Jordanov and Ljupčo Pejov

10:30 **PANČE NAUMOV**

Plenary Lecture PL-1

New York University Abu Dhabi

THE MYSTERY OF FIREFLY BIOLUMINESCENCE – SOLVED?

11:10 **Break**

Chairpersons: Vladimir Ivanovski and Pance Naumov

11:20 **EVELINA SLAVCHEVA**

Plenary Lecture PL-2

Bulgarian Academy of Science, Sofia, Bulgaria

ANION EXCHANGE MEMBRANE ELECTROLYSIS CELLS

– CLEAN COST EFFICIENT TECHNOLOGY FOR HYDROGEN PRODUCTION

11:55 **THOMAS MAYERHÖFER**

Plenary Lecture PL-3

Friedrich Schiller University, Jena, Germany

ULTRA-SENSING WITH SLIT-ENHANCED INFRARED SPECTROSCOPY

13:30 **Coffee Break**

12:50 **VLADIMIR D. JOVIĆ**

Plenary Lecture PL-4

Institute for Multidisciplinary Research, University of Belgrade, Belgrade, Serbia

**ELECTRODEPOSITED COATINGS AS CATHODES FOR HYDROGEN EVOLUTION
IN INDUSTRIAL CHLOR-ALKALI ELECTROLYSIS**

Hall Tzar SAMOIL,

Coordinators: Ruzica Manojlovic and Zagorka Koneska

13:30-18:30

POSTER SESSION 1

(please make sure to set up posters for this session from 10:30 to 13:30)

Electrochemistry (**EC**), Metallurgy (**ME**), Material Science and Technology (**MST**), Physical Chemistry (**PC**), Polymer Science (**PS**) and Spectroscopy and Structural Chemistry (**SSC**)

14:30 **Boat trip to St. Naum (or other Scheduled programs)**

Tuesday, September 13th 2016

Hall BILJANA

PLENARY LECTURES

Chairpersons: Svetomir Hadzi Jordanov and Thomas Mayerhöfer

9:00

CANER ZANBAK

Plenary Lecture PL-5

Turkish Chemical Manufacturers Association

**SAFETY AND SECURITY CONCEPTS IN CHEMICALS MANAGEMENT AND
PRIVATE/PUBLIC PARTNERSHIP IN CHEMICAL SUPPLY CHAIN SECURITY**

9:40

AYHAN ORAL

Plenary Lecture PL-6

Çanakkale Onsekiz Mart University, Çanakkale, Turkey

**PREPARATION AND CHARACTERIZATION OF GELATIN/GERANIOL
ELECTROSPUN NANOFIBERS**

10:15

Coffee break

HALL BILJANA

PLENARY LECTURES

Chairperson: Koleta Zafirova

10:30

KRSTE DIMITROVSKI

Plenary Lecture PL-7

Faculty of Natural Sciences and Engineering, Ljubljana, Slovenia

**VORTEX YARNS – OPPORTUNITY FOR INCREASED MARKET
COMPETITIVENESS**

11:10

ILDA KAZANI

Plenary Lecture PL-8

Polytechnic University of Tirana, Tirana, Albania

MAINTENANCE OF ELECTROCONDUCTIVE FLEXIBLE SUBSTRATES

12:40 **Break**

HALL BILJANA

12:10 **ORAL PRESENTATIONS**

Chairpersons: Ilda Kazani and Elena Tomovska

- **Eva Magovac, Sandra Bischof, Bojana Vončina**
Sodium phytate – an alternative halogen free flame retardant for cotton
- **Ebru Bozaci, Esen Özdoğan**
Basalt fibers and its applications
- **Jovan Stepanović, Dušan Trajković, Dragan Stojiljković, Dragan Đorđić**
Predicting the behavior of needled geotextile materials in the region of elastic deformations
- **Tülay Gülümser**
Durable fragrant finishing of textile materials
- **Sonja Jordeva, Elena Tomovska, Dusan Trajković, Koleta Zafirova**
Some characteristics of an insulation structure from recycled apparel cutting waste
- **Aslı Demir**
Antimicrobial agents in textile industry

14:00 **ORAL PRESENTATIONS**

Chairpersons: Evelina Slavcheva and Karmina Miteva

- **V. Stilinović, G. Horvat, T. Piteša**
Experimental study and molecular dynamics simulation of solvent vapour effects on solid state phase transition in dibenzoylmethane
- **Iveta Boshnakova, Elefteria Lefterova, Evelina Slavcheva**
Montmorillonite as a catalytic support for OER in water electrolysis
- **Gordan Horvat, Nikola Cindro, Leo Frkanec, Vladislav Tomišić**
Thermodynamics of complexation of alkali-metal cations by calix[4]arene amide derivatives
- **J. Glassey, E. Schaer, A. Porjazoska Kujundziski, V. Meshko, L. M. Madeira, M. Polakovic, N. Kockmann**
Assessment of teaching effectiveness in chemical engineering education
- **Mehmet Ali Oral, Osman G. Ersoy, İ. Ersin Serhatlı**
Effects of polymer filler interface improvements on mechanical and physical properties of CaCO₃ filled polypropylene composite

- **G.I.Patronov, I.P.Kostova**

Synthesis and structure study of samarium doped zinc borophosphate materials

- **Nagihan Kaya, Derya Topkaya Taskiran, Serap Alp**

Synthesis and spectroscopic studies of new coumarin azlactone derivatives containing thiophene moiety

- **Ufuk Çoruh, Kaan Karaoğlu, Kerim Serbest, Ezequiel M. Vazquez Lopez**

The molecular structure determination of $[\text{Cu}\{\{\text{h5-C5H5}\}\text{Fe}(\text{h5-C5H4})\text{-(H)C=N-N=C(H)-(naphthalen)}\}\text{2}]$

16:20 **ORAL PRESENTATIONS**

Chairpersons: Zagorka Koneska and Jane Bogdanov

- **S. Stepanovic, A. S. Nikolic, M. Zivkovic, F. Vlahovic, M. Zlatar, M. Kuraica**

The role of spin states in catalytic mechanism of the intra- and extradiol cleavage of catechols by O_2

- **Semra Çoruh, Elif Hatice Gürkan, Yusuf Tibet**

Investigation of dye removal using travertine as an adsorbent: full factorial design analysis

- **Ali Özel, Jale Yanik, Suat Ucar, Ahmet Rasim Özkan**

Green diesel production

- **Majlinda Daci-Ajvazi, Lulzim Zeneli, Nexhat Daci, Dafina Hoxha, Sevdije Govori, Albana Mehmeti**

Low cost adsorbents for removal of organics and inorganics from standard solutions and natural waters

- **Savic, Ivana Nikolic, Tatjana Kundakovic, Ivana Savic-Gajic, Ana Tacic**

Modeling total flavonoids extraction from chickpea (*Cicer arietinum* L.)

HALL TZAR SAMOIL

Coordinators: Elena Tomovska and Karmina Miteva

12:30 – 17:30

POSTER SESSION 2

(please make sure to set up posters for this session from 10:15 to 12:00)

Analytical Chemistry (**AC**), Environmental Chemistry (**EN**) and Textile (**TX**)

20:00 **CONGRESS DINNER**

Wednesday, September 14th 2016

HALL BILJANA

PLENARY LECTURES

Chairpersons: Bozidar Ristovski and Jana Simonovska

9:00 **JANE BOGDANOV**

Plenary Lecture PL-9

Institute of Chemistry, Faculty of Natural Sciences and Mathematics, Skopje, Macedonia

HEXACHLOROCYCLOHEXANES- ENVIRONMENTAL FATE, CHEMISTRY AND DEHALOGENATION APPROACHES REVISITED

9:40 **DARKO DIMITROVSKI**

Plenary Lecture PL-10

Faculty of Technology and Metallurgy, Skopje, Macedonia

APPLICATION OF PROBIOTICS IN FOOD

9:40 **VIOLETA IVANOVA-PETROPULOS**

Plenary Lecture PL-11

Faculty of Agriculture, University "Goce Delčev" – Štip, Krste Misirkov, bb, 2000 Štip, Republic of Macedonia

APPLICATION OF ADVANCED SEPARATION TECHNIQUES IN WINE QUALITY CONTROL

10:20 **Coffee break**

HALL TZAR SAMOIL

Coordinators: Darko Dimitrovski and Jane Bogdanov

11:20-15:00

POSTER SESSION 3

(please make sure to set up posters for this session from 9:00 to 12:00)

Biochemistry (**BC**), Bio - and Food Engineering (**BF**), Education (**ED**), Fuel and Energy (**FE**), Medicinal and Pharmaceutical Chemistry and Engineering (**MPCE**) and Organic Chemistry and Engineering Chemistry (**OCT**)

15:00 **CONGRESS CLOSURE**

15:00 **SPECIAL TOURS** (by appointment only)



SOCIETY OF CHEMISTS AND TECHNOLOGISTS OF MACEDONIA
XXIV Congress of SCTM, Ohrid 11 – 14 Sept. 2016

	11/09/16	12/09/16	13/09/16	14/09/16
09:00	<div>Registration 11:00→</div>	Registration 9:00 → ...	PL-5 C. ZANBAK 9:00 – 9:40	PL-9-J. BOGDANOV 9:00 – 9:40
		OPENING CEREMONY 10:00 – 10:30	PL-6 A. ORAL 9:40 – 10:15 <i>10:15 – 10:30 Coffee break</i>	PL-10 D. DIMITROVSKI 9:40 – 10:20
10:00				
		PL-1 P. NAUMOV 10:30 – 11:10 <i>Break 11:10 - 11:20</i>	PL-7 - K. DIMITROVSKI 10:30 – 11:05	PL-11 V. IVANOVSKA PETROPULOS 10:20 – 11:00 <i>11:00 – 11:20 Coffee break</i>
11:00				
		PL-2 E. SLAVCHEVA 11:20 – 11:55 PL-3 T. MAYERHÖFER 11:55 – 12:30 <i>12:30 - 12:50 Coffee break</i>	PL-8 I. KAZANI 11:05 – 11:40 <i>11:40 - 12:10 Coffee break</i>	POSTER SESSION 3 (BC, BF, FE, OCT, MPCE) 11:20 – 15:00 (Poster mounting time 9:00 – 12:00)
12:00				
		POSTER SESSION 1 (EC, ME, MST, SSC, PC, PS) 13:30 – 18:30 (Poster mounting time 10:30 – 13:30)	POSTER SESSION 2 (AC, EN, TX) 12:10 – 17:30 (Poster mounting time 10:15 – 12:00)	CONGRESS CLOSURE 15:00
13:00				
14:00				
15:00				
	WELCOME PARTY 19:30	BOAT TRIP TO St. Naum 14:30 – 17:00	CONGRESS DINNER 20:00	SPECIAL TOURS 15:00 → By appointment

SPONSORS

The 24th Congress of SCTM was financially supported by:



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